

Brooks¹² says, "No family of birds is so badly in need of correlated research in field and study as the gulls, especially in America."

It would appear that the only way to obtain an accurate, complete plumage story is through a study of banded birds under their normal environmental conditions.

¹² Brooks. *Ibid.* p. 19.

The Mexican Bean Beetle, *Epilachna varivestis* Mulsant, Does Damage in Utah in 1943

This lady-bird beetle, which feeds upon plants, especially beans, has become well established in Utah Valley. It was first reported as occurring in Utah in 1922¹ and in Utah County in 1939². During the past summer it has done considerable damage to the bean crop of this valley. This beetle passes the winter only in the adult stage, hibernating under leaves, weeds and along ditch banks. It does not emerge until late spring, and very few eggs are found before the first of July. By the middle of July the larvae are about half grown and are doing much damage by eating the leaves of beans. The larvae are oval, yellow, spine-covered creatures, which grow to 1/3 of an inch in length in about four weeks. Pupa-tation then takes place on the underside of the bean leaves. Only one generation of importance has been observed here in the Provo area.

This species may be effectually controlled by using any one of a number of sprays or dusts. Apply fresh, high-grade insecticides to the leaves of the beans. It is important that the dust or spray covers the underside of the leaves, if the control is to be successful. Applications of the insecticide should be made every 10 days from the time the eggs are observed until about the middle of August.

Because of the damage that this pest may do it is important that Crop Pest Inspectors, Agricultural Agents and truck gardeners of this area be familiar with this insect as well as methods of its control.—V. M. T.

¹ Tanner, Vasco M. 1929, *Pan-Pacific Entomologist*, Vol. V, pp. 183-86.

² 1940, *Great Basin Naturalist*, Vol. I, No. 2, p. 91.